

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claims 1 to 10. (Canceled).

11. (New) A simulation system for computer-implemented simulation and verification of a control system under development, comprising:

a generic model animation and in-model calibration interface adapted to use measurement and calibration technologies with a host-target architecture, a host including at least one respective modeling tool and on target software of the control system is executed.

12. (New) The system according to claim 1, further comprising a target server adapted to connect the modeling tool with a target.

13. (New) The system according to claim 2, wherein the target server includes a protocol driver of a communication protocol adapted for communication with the target.

14. (New) The system according to claim 1, further comprising a plurality of simulation processes with corresponding memory and interface modules, the modules including distinct memory locations adapted for inter-module communication.

15. (New) The system according to claim 4, wherein simulation is performed by execution of a control system simulation model, the simulation model including a plurality of sub-models being performed on one of the plurality of modules respectively.

16. (New) The system according to claim 4, wherein at least some of the modules are dynamically reconfigurable for communication via distinct memory locations.

17. (New) A host of a simulation system for computer-implemented simulation and verification of a control system under development, comprising:  
a generic model animation and in-model calibration interface adapted to use measurement and calibration technologies for a host-target architecture, the host including at least one respective modeling tool and a target server to connect the modeling tool with a target.

18. (New) A method, comprising:  
computer-implemented simulating and verifying a control system under development by of a simulation system including a generic model animation and in-model calibration interface adapted to use measurement and calibration technologies with a host-target architecture, a host including at least one respective modeling tool and on target software of the control system is executed.

19. (New) A computer-readable storage medium including a set of instructions executable by a computer, the set of instructions comprising:  
computer-implemented simulating and verifying a control system under development by of a simulation system including a generic model animation and in-model calibration interface adapted to use measurement and calibration technologies with a host-target architecture, a host including at least one respective modeling tool and on target software of the control system is executed.